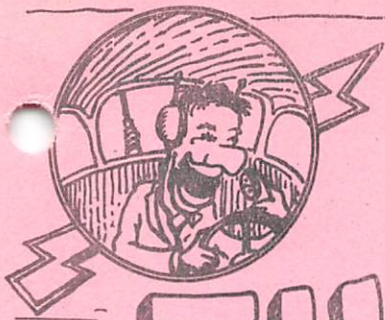




15TH Anniversary YEAR

THE BLURB

A.R.E.A. MEMBER

PHILMONT MOBILE RADIO CLUB INC.

September
1964



PROJECT

Apollo SPACE VEHICLE

RETRO
ROCKETS

SOLAR CELLS

NAVIGATION & FLIGHT
CONTROL EQUIPT.

FUEL TANK

GALLEY & FOOD
SUPPLY

DIVISION
DOOR

'PILOT' COMPARTMENT

SURVIVAL EQUIPT
&
STORAGE SPACE

ABORT ROCKETS

Published Monthly by the
Phil-Mont Mobile Radio Club

Charter Member: AREA

VOLUME 14

NUMBER 9

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Typist K3AUW

The "BLURB" is published by and for the members of Phil-Mont to further the interest of Amateur Radio in general and Mobile Radio in particular. We endeavor to keep the news accurate, interesting and in a small way educational. Copying and quoting is permitted and subscriptions are gladly exchanged with other radio clubs.

DEADLINES

The "BLURB" is mailed on the last Monday of the month. All material for the "BLURB" must be received by the Editor, K3KUD, before the 15th of the month.

1964 CLUB OFFICERS

President: Ed Moore W3EQV
Vice President: Al Hamilton W3GIF
Treasurer: George Weed W3MHR
Secretary: Al Lewis W3WPD
Directors: W3QQH (E64), K3DJE (E65)
W3YHV (E66), W3GOW (A)
K3HIJ (A), and all 1964
Club Officers.

NET AND NET FREQUENCIES

Channel 1 - 29.493 mc Channel 3 - 147.78 mc
Channel 2 - 29.629 mc Channel 4 - 50.7 mc
Orange Juice Net Weekdays 0700 - 0730
Scrambled Egg Net 0730 - 0830
Ten-on-Ten Sundays 1000 - 1100
Blarney sessions anytime All Channels
29.493 kc 0930 - 2400
Monitored daily for the benefit of mobiles
in the Philadelphia area.

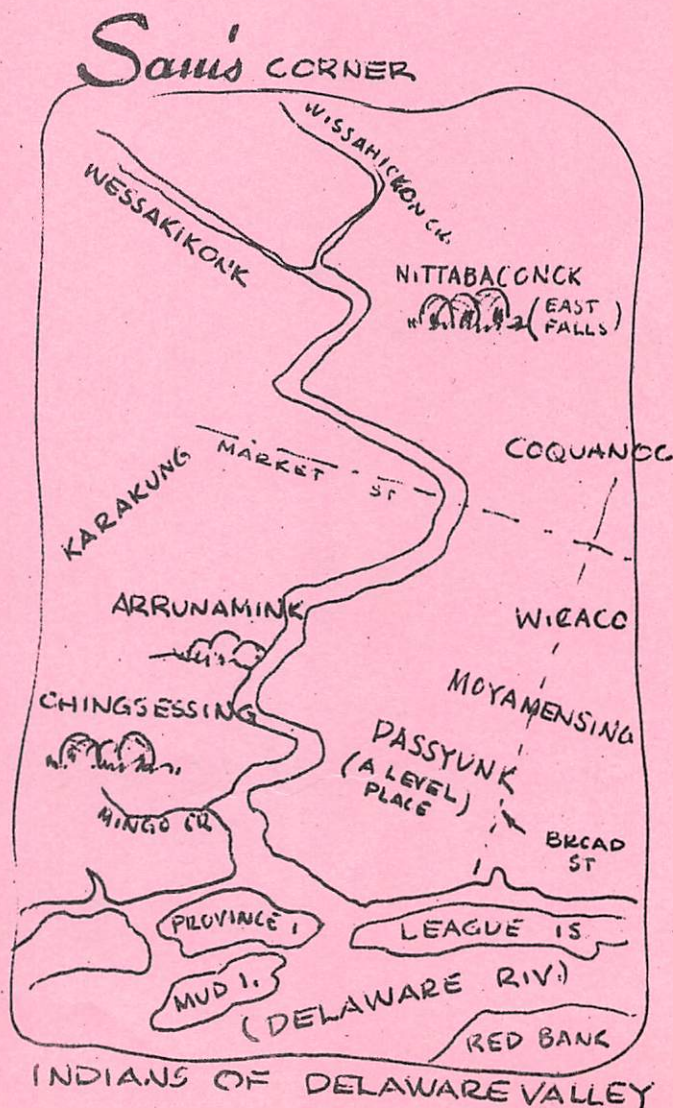
PMRC CALENDAR

MEETINGS

Regular Meetings: First Monday of
each month
Time: 2000 hours (8:00 p.m.)
Place: THE FRANKLIN INSTITUTE
20 & Benjamin Franklin Parkway

MID-MONTH SCHEDULE

Feb. 12,	W3QQH	July 15,	W3NIP
March 18,	K3OEJ	Aug. 19,	K3OEJ
April 15,	W3WNC	Sept. 16,	K3CEE
(Stag Dinner)		Oct. 14,	W3GOW
May 13,	W3MHR	Nov. 18,	W3CDY
June 17,	W3VVS	Dec. 16,	



PREZ SEZ

Instead of the usual "vacation is over" stuff this month, let's examine some RADIO CLUB activities designed to continue our vacation and fun into the coming months.

1. Want a family outing? How about going to one of the many local HAMFESTS? South Jersey Radio Association affairs are always great. Swimming, picnicing, events and prizes for OM's, XYL's and harmonics. Gloucester County and Mobile Sixers are others. Phil-Mont doesn't sponsor these, but you will see plenty of Philmonters there.
2. Some scientific type fellows spend considerable time periods at the Polar Regions. Bartol Research Foundation of the Franklin Institute has asked Phil-Mont's assistance in keeping these men in touch with their friends, family and homes. They don't have public telephones. We can't do this by using mobiles, but how about your home station? Interested? Here is a good chance to justify all that equipment to the XYL and have a good time doing it. Keep tuned in for details.
3. Do you want to change your ham gear, or add to it? Phil-Mont's October auction is the place - Don't miss this one!
4. Now that FCC is planning a crackdown on 11 meter Citizen Band "hamming", opportunities will again be numerous for a Phil-Mont type communications network. Do you know of a way 50 mobiles and base stations can assist in a civic affair or other affair? Contact a club officer.
5. Do you have spare time or a creative idea? Offer them to the club - W3QQH and the Banquet Committee could use both as they put together the best affair (Phil-Mont's 15th) in club history. Get in the swim of this activity - at the very least, get your tickets now! Don't wait 'til they are all gone.
The point of all this is simply that transmitting and receiving can be, in fact, must be, done by the licensed ham; but the type of activity illustrated above, the type which makes our hobby a continual recreation must be done by an ORGANIZED RADIO CLUB. We need a club to enhance our hobby. We Gumbaudies need Phil-Mont - keep active - continue to make PHIL-MONT TOPS!

P.S. 38 members and 8 visitors got at least a buck's worth out of the July meeting. Hope you were one of the lucky ones who attended.

de W3EQV

* * * * *

IT SEEMS TO ME

The Olde Editor is off again on another of his DX trips and this time it seems as though I may be gone for while. In my absence my XYL will carry on and past performance indicates that she will do a good job. I would appreciate it if all material for the October BLURB was either mailed to my home or given to W3QQH as early as possible. This will help in getting the issue together and insure mailing on time.

I feel that the willingness of my wife to help out in a situation like this is a tribute to Phil-Mont and reflects the interest that she has in the club.

de K3KUD

NEWS AND ACTIVITIES

Phil-Mont Calender for September:

Monday, Sept. 14	8:00 PM	Regular meeting-Franklin Institute.
Wednesday, Sept 23	8:00 PM	Mid-month meeting at K3CEE.
Sunday, Sept. 27	9:30-11:30 AM	Annual Ten-On-Ten Roundup-Ch. 1.
Monday, Sept 28	8:00 PM	BLURB folding at W3LEM.

* * * * *

DRIVE CAREFULLY, THE SCHOOLS ARE OPEN !

* * * * *

George Weed, W3MHR, appeared on WCAU-AM (The Ed Harvey Show) along with three other local hams. A discussion of ham radio in its various aspects was the program and it went off very well. W3QQH taped the entire show and George's words of wisdom are now a matter of record.

We understand that George and the others met Eva Gabor who was also appearing on the show, but in another segment. George's comment --"She is a good-looking woman". You're telling us ?

* * * * *

The regular meeting of the club was held August 3 at the Franklin Institute. The program featured Chuck Snyder, W3NIP, who presented movies and slides covering various events in Phil-Mont's 15 year history. The program was interesting and proved definitely that many of our ham operators are also hams in the acting sense.

The scheduled talk by Harold Hegan, W3ZN, was cancelled because of Harold's inability to be present. This presentation will be scheduled for another meeting. Tom Donnelly, W3VCE, gave a brief but lively account of his trip to Alaska via the Alcan Highway. Tom discussed only the "technical" portion of the trip, and left the social aspects to our imagination.

Thirty-eight people attended the meeting, including six visitors.

* * * * *

A new order, issued by the FCC on July 23, makes drastic changes in the operating rules for CB. The intent of the order is to eliminate completely the "Hamming" for which CB has become (in)famous. The FCC has indicated that if this order does not have the desired effect the Citizen's Band will be done away with.

* * * * *

The Bartol Research Foundation of the Franklin Institute has requested that Phil-Mont assist in contacting their ham stations in the Arctic and Antarctic Regions. Additional information is being obtained and details will be made known as soon as possible. In the interim, anyone in the club who is interested in setting up schedules with these stations should contact Ed Moore, W3EQV or Lloyd Sherman, W3CDY, for details.

* * * * *

NEWS AND ACTIVITIES (continued)

The regular meeting of Phil-Mont for September will be held on Monday, Sept. 14. Please note that we are late this month due to Labor Day. The program will consist of a talk entitled "Antarctica, Frozen World of Science" which will be presented by Douglas Thompson of the Bartol Research Foundation. This should be an interesting subject in view of the request for assistance from the Bartol Foundation mentioned elsewhere in this issue. The balance of the program will be short talks by Harold Hogan, W3ZN, on the "Eyeball Network" and Harold Grace, W3HFY, on "How it feels to be a candidate for ARRL Director". This will be the first meeting of the fall season and we are hoping for a large turnout. As always visitors are cordially invited.

* * * * *

A note from George Walker, K3EZJ, asks us print the following announcement:

To Phil-Monters residing in (or almost in) Lower Merion Township.

The township CD Communications Plan has vacancies for 10 meter mobiles. (29.57 mc) to be available for use when serious fall-out danger is not present.

Anyone wishing to have their name placed on the "on call" list should contact RACES R/O K3EZJ or Alternate RACES R/O K3CEE.

No special drills are necessary for regulars on the Ten-On-Ten Net.

It is anticipated that 29.57 mc crystals will be available for loan to volunteers.

* * * * *

The Annual Ten-On-Ten Roundup will be held this year on September 27. Net Control will make the usual roll-call between 1000 and 1100, but will be on the air from 0930 to 1130 for the purpose of checking in additional stations. Everyone is invited, members and non-members, with or without traffic. We are shooting for 175 check-ins and with your help we can do it.

* * * * *

Keep in mind that October is the month of the big auction. Start digging out those goodies and give up eating lunch to save money for all the bargains which will be available.

* * * * *

Don't forget that the BLURB License Renewal Service is available to Phil-Mont members. This reminder service includes all types and ~~classes~~ of licenses and costs nothing. Drop a postcard to: The BLURB, License Renewal, 10 N. York Rd., Willow Grove, Pa. On the card place the following information:

Your name	Class of license
Street address	Call or license number
City and ZIP code	Date of expiration

* * * * *

CLUB NEWS AND ACTIVITIES (continued)

The following was contained in a short note received by the editor:

"Thanks to all concerned (W3DQG, W3QV, W3QQH, and any others) who helped when I was foolish enough to get stranded on the turnpike. DQG was good enough to take me clear to a service station and back. This just goes to show another advantage of being Phil*mont mobile."

Bob Mynster, K3UWO

* * * * *

The mid-month meeting for August was held at the home of Art Garner, K3OEJ, in Havertown. Vice-Prez Al Hamilton, W3GIF, presided in the absence of the Prez.

A report on the price of reflective bumper stickers was presented, however, due to the high cost involved, it was decided to obtain additional estimates. The high noise level and poor receiving conditions on 10 meters at W3TKQ came under discussion and as a result, the W3TKQ Committee was authorized to obtain a colinear antenna cut for 29493 kc and to proceed with its installation in a new location on the roof of the Institute. It is the opinion of the committee that the improved S/N ratio thus obtained will result in better reception. The meeting was well attended and a great deal was accomplished.

* * * * *

As mentioned elsewhere in this issue, October is the month of the BIG auction. In order to permit members and non-members who might have gear to sell, a bit of time to prepare for this outstanding event, the following rules are published:

1. All items to be sold must be properly tagged. This will be done when equipment is delivered to the Franklin Institute first floor auction area.
2. No item may be withdrawn once offered for sale, except by the auctioneer, for lack of bids.
3. The club will receive 10% of the selling price, but not more than \$5.00, for each item sold.
4. In the event that the owner buys back his own gear, the club will receive 10% of the selling price, but not more than \$1.00.

Additional information will be published in the next issue of the BLURB, but please note that you do not have to be a Phil-Mont member to buy or sell gear at this auction.

* * * * *

DID YOU ORDER YOUR BANQUET TICKETS YET? BETTER HURRY !

SWAP AND SHOP

For sale: Gonset GSB-100. 100 watt SSB, CW and 30 watt AM.
80 through 10 meters w/very stable VFO. FB shape. \$250.00

Contact K3YWH
828-0911

For sale: HQ 140X - general coverage receiver. Excellent
condition.

Contact W3DJW
SH-7-1177

Wanted: (2) 6 meter FM transceivers. RCA CMV-2 or equal.

Contact K3HIJ
TU-7-1451
PE-5-9115

For sale: CLUB PROPERTY.

3 KW generator mounted in fully enclosed $\frac{1}{2}$ ton
trailer. Motor generator Onan Model W2C, 2 cyl.,
4 cycle, water-cooled. Coil type ignition, elect.
start. 6 v battery included.

Trailer contains generator; voltage, current; frequency;
and running-time meters; circuit breakers; wheel chocks;
jacks; running lights.

\$400.00

Hammarlund Super-Pro receiver. 540 kc to 20.00 mc.
Excellent condition, complete w/power supply.

\$100.00

Contact Jim Spencer, W3QQH
TU-4-8469

For sale: Heath Apache TX-1 transmitter \$195.00

Heath SB-10 SSB generator \$ 75.00

Heath AM-2 SWR bridge \$ 12.00

Johnson 250-20 Low-pass filter \$ 10.00

Stancor ST-203-A Mobile transmitter \$ 25.00

Gonset Triband converter \$ 15.00

Carter dynamotor 12v/600v @ 250 ma \$ 7.00

Contact Howard Trout, W3IGW
326-2431

For sale: An evening of fun and fellowship plus an excellent meal.
Dancing, prizes and surprises. Meet old friends, make new
friends. Phil-Mont's 15th Anniversary Dinner-Dance, October
24 at the William Penn Inn. Price per couple \$ 15.00

SWAP AND SHOP (continued)

For sale: Elmac A54H mobile transmitter, 12v
Morrow MBR-5 mobile receiver
Morrow receiver Vibrapack
PE103A, antenna relay, cables, W612A supply \$125.00

Contact Jim Spencer, W3QQH
TU-4-8469

For sale: DuMont 5822 FM receiver complete w/power supply.
25-54 mc FM; xtal controlled, squelch, speaker, etc.
First quality FM receiver for 6 meters or safety services. \$ 75.00

Pentron 4 channel electronic mixer \$ 10.00

Contact Jim Spencer, W3QQH
TU-4-8469

For sale: Galaxie "300" SSB on 80, 40, 20 meters.
Complete with power supply and speaker. \$300.00

Contact Bob Diefenderfer, K3DJE

For sale: Heath Pawnee-2 meter transceiver.
Professionally built and aligned. \$175.00

Contact W3GYB
HI-6-6711

JOLLY ROGER JAZZ

When a "pirate" radio ship calling itself Radio Caroline started broadcasting pop music off Britain's east coast in March, the government was inclined to laugh it off as a huge joke.

This saucy wench with the black patch over one eye wouldn't last more than a few weeks. What Briton would want to listen to disc jockeys broadcasting illegally from behind the three-mile limit when he could hear uplifting talks on BBC?

But the government was wrong. Operating from a 750-ton passenger ship that has been converted into a radio station, Radio Caroline quickly built an audience of seven million listeners. And now Caroline has been joined by another tough looking buccaneer, Radio Atlanta, a converted timber vessel which is anchored off the east coast seaside resort of Frinton-on Sea. It, too, pipes canned music and commercials to the delighted natives. Between them it looks as though the two "pirates" may have blasted a breach in British defenses big enough for commercial radio to crawl through, thus ending BBC's 42-year old monopoly on radio broadcasting.

Emboldened by the success of Caroline and Atlanta in capturing the housewife's ear, a powerful radio lobby is now clamoring for the government to throw open the whole field of broadcasting to commercial interests.

It appears that Sir Alex Douglas Home's Tory government may have landed itself with a red hot issue for the general election in October. The labor party is opposed to commercial radio in general, and to radio "piracy" in particular, and would like to leave broadcasting in the hands of BBC.

de the Pittsburgh Press via Static

ORDER YOUR QSL CARDS NOW!

FILL IN INFORMATION ON
SAMPLE CARD BELOW AND MAIL
TO **GEO. WEED - W3MHR**
WITH YOUR CHECK!

	CLUB FREQUENCY 29.498 Mc.
Xmtr _____	To _____
Rcvr _____	Confirming QSO of _____
Ant _____	Ur _____ Sigs Q _____ R _____
_____	On _____ Mc _____
	

PRICE LIST:

FULL (4) COLOR CARD, CALL LETTERS, NAME & ADDRESS
IN YOUR COLOR CHOICE \$ 5.00 PER 100 CARDS

BASIC COLOR CARDS (BLACK) AS ABOVE WITH CALL
LETTERS, NAME & ADDRESS IN YOUR COLOR CHOICE
\$ 3.50 PER 100 CARDS

**PITY THE AMATEUR RADIO OPS...THEY GET THE
BLAME FOR EVERYTHING !!!**

**MR. BOOSTER, IS YOUR
BOY OPERATING HIS HAM
RADIO AGAIN? MY TV HAS
GONE HAYWIRE AGAIN!
SOME KIND OF INTERFERENCE,
IT JIGGLES UP & DOWN!!**

**A HAM RADIO! BET
THAT'S WHY MY FUSE
IN THE GARAGE BLEW!**

**MAYBE THAT'S WHY
MY WASHER'S BEEN
OVER SUDSING!!**

**DOC ZELTZER TOLD ME
HIS DIATHERMY WAS ON
THE BLINK, HE SHOULD
KNOW ABOUT THIS!!**

**NO! HE'S PLAYING GOLF...
IN FACT HE DON'T
USE IT MUCH
ANYMORE!!**

**AND THAT BIG
AERIAL OF HIS...
I'M SURE IT ATTRACTS
LIGHTNING, AND US
LIVING SO CLOSE!**

**EVEN CHARLIE
BROWN GETS IT!**

WITH APOLOGIES TO JIMMY HATLO, KING FEATURES & JIM FETTER!

CHANNEL CHATTER

On August 3 Nelson, W3DYP, contacted Joan, WA4MUJ, in Hollywood, Florida, on Ch 1. Joan sends her 73 to all members of Phil-Mont—Bob, K3CEE, is now taking up SCUBA diving. Watch yourself in those dives, Bob!—Bob, W3WUX, is now on 6 meters both AM and FM —That's all the CC we received this month, but we do get -

PROMISES, PROMISES!

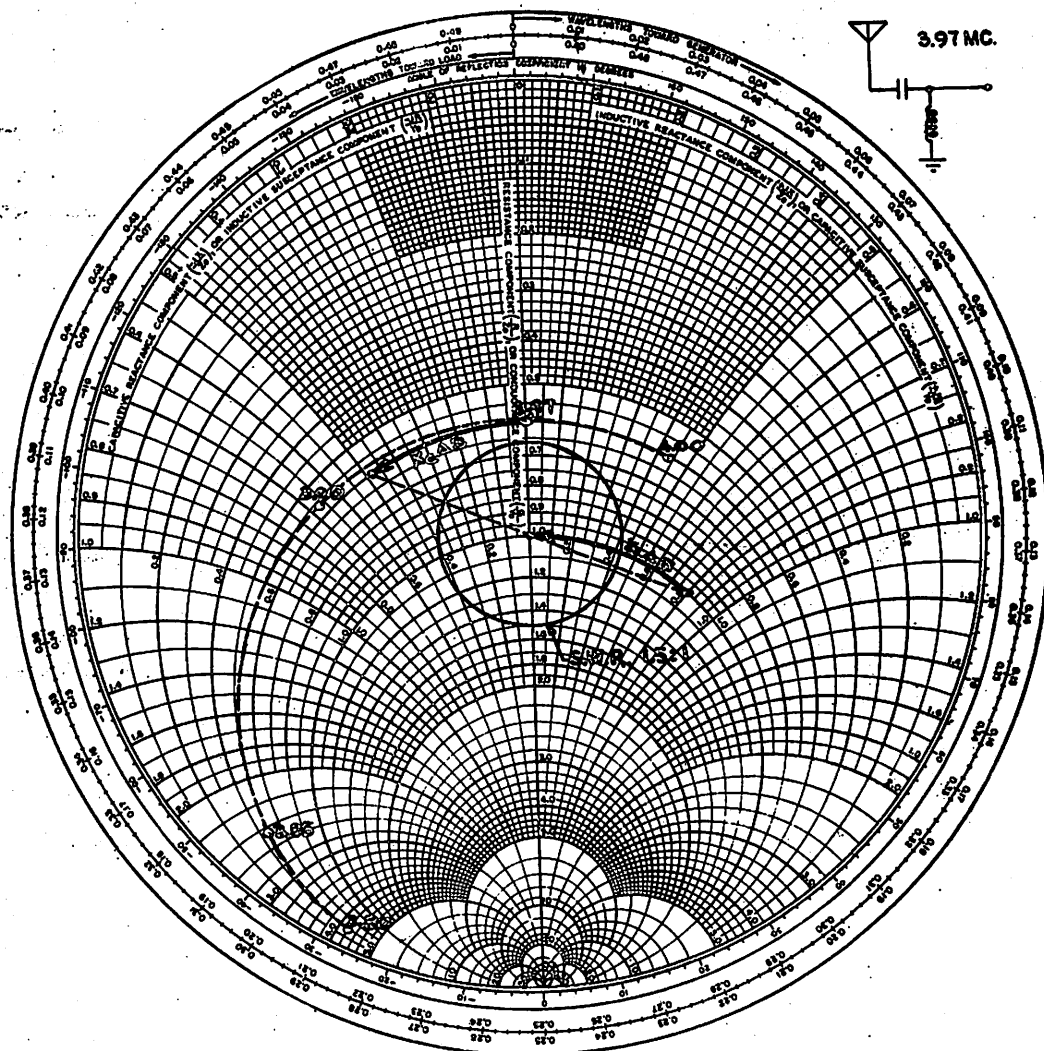
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September 1964

Many hams operating 80 meter mobile have experienced difficulty tuning and loading their antennas. This is particularly true with transmitters that are designed with fixed loading in the Pi network. To add to this difficulty, many of the present day mobile transmitters tend to be regenerative when they are working into a highly reactive or less than 40 ohm non-reactive loads. To provide an answer to this recurrent problem, your "Globe" staff conducted an investigation.

A conventional rear deck mounted antenna was selected. The antenna used was a "Hustler" 80 meter whip and all the above symptoms existed. The antenna was tuned to 3.97 Mc and impedance measurements were taken over the entire phone portion of the 80 meter band. The impedances were normalized and plotted on the below Smith chart.

Inspection of the plot on the Smith chart indicates that the resonant impedance is 30 ohms and not 50 as manufacturer specifications indicate and that it falls outside of the 1.5:1 area. Correction of the antenna over the entire 80 meter band would require an extensive filter network and the average corrected impedance would provide a higher SWR than most hams would accept.



With a two element filter an SWR of 1 to 1 could be expected at the designed frequency and frequency divergence could be obtained by variation of the antenna tuning stub. It would also provide maximum area of impedance correction around the resonant frequency.

The first point on the Smith chart was chosen to provide a series capacitor that would modify the antenna terminal impedance sufficiently to allow for correction by a shunt inductance. The capacitor shift is indicated by the arc designated $X_C \Delta B$. The dashed line indicates the transposition necessary to determine the point for the shunt inductance. The arc designated $X_L \Delta B$ is the inductance required to provide a 1:1 SWR.

From the chart we can determine:

a - $X_C \Delta B = 0.49$

b - $X_L \Delta B = 0.80$

Element Calculations:

$$L = \frac{50}{2\pi f X_L \Delta B}$$

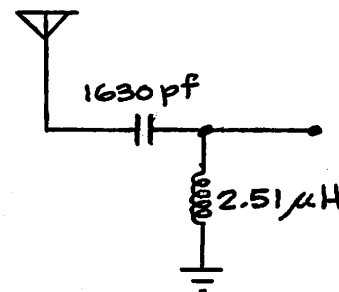
$$L = \frac{50}{6.28 \times 3.97 \times 10^6 \times 0.8}$$

$$L = \frac{50 \times 10^{-6}}{19.92} = 2.51 \mu H$$

$$C = \frac{1}{X_C \Delta B (50) 2\pi f}$$

$$C = \frac{1}{0.49 \times 50 \times 6.28 \times 3.97 \times 10^6}$$

$$C = \frac{1}{610.79 \times 10^6} = 1.63 \times 10^{-9} = 1630 \text{ pf.}$$



$2.51 \mu H = 2" \text{ DIA} - 9 \text{ TURNS}$
#14 WIRE - CLOSE WOUND

The physical properties of the inductance were found by applying the $2.51 \mu H$ factor and the 3.97 mc frequency to a nomograph.

The following improvements were achieved:

- a. An impedance of 50 ohms was obtained at 3.97 mc .
- b. The operating area was considerably increased.
- c. Transmitter instability was eliminated over a larger area.